

16CT03012

METHOD AND APPARATUS FOR IMAGE RECONSTRUCTION AND X-RAY
CT IMAGING APPARATUS

ABSTRACT

To decrease the streak artifact in the reconstructed image due to the existence of foreign matter of high X-ray absorption rate such as metals, the discrete region containing the data having abrupt change of value is separated from the projection data in the sequential order of radiographic detector elements, data is transformed to continuous data that the value gradually smoothly changes (step ST2), then only the continuous data is filtered (step ST3), thus filtered data is composed with the data of the discrete regions to form the projection data used for the image reconstruction (step ST4).